

We claim:

1. A method for correcting misregistration of scanned thin line character

components, comprising:

detecting a misregistered pixel;

determining whether the misregistered pixel is part of a character,

applying a three-dimensional color vector determinant to the misregistered pixel;

and

reducing the chrominance component of the misregistered pixel to provide a

corrected pixel.

2. The method of claim 1 wherein said detecting include identifying a pixel as being at an edge of an image portion.

3. The method of claim 2 wherein said identifying includes identifying a pixel as being at an edge of an image portion using a gradient edge detector, including selecting an image kernel filter, having integer values GTE -2 and LTE +2, including zero, setting a predetermined threshold, comparing the image filter kernel to the predetermined threshold, and classifying the pixel as a misregistered pixel IFF the image filter kernel is greater than the predetermined threshold

4. The method of claim 1 wherein said determining includes checking the gradient and checking the luminance of a pixel.

5. The method of claim 1 wherein said reducing includes reducing the chrominance component of the misregistered pixel to provide a corrected pixel with a fuzzy chrominance reduction function.

6. The method of claim 1 which further includes locating an edge pixel position and classifying the edge position pixel as a text region.

7. A method for correcting misregistration of scanned thin line character components, comprising:

detecting a misregistered pixel, including identifying a pixel as being at an edge of an image portion,

5 determining whether the misregistered pixel is part of a character, including checking the gradient and checking the luminance of a pixel;

applying a three-dimensional color vector determinant to the misregistered pixel, and

10 reducing the chrominance component of the misregistered pixel to provide a corrected pixel.

8. The method of claim 7 wherein said identifying includes identifying a pixel as being at an edge of an image portion using a gradient edge detector, including selecting an image kernel filter, having integer values GTE -2 and LTE +2, including zero, setting a predetermined threshold, comparing the image filter kernel to the predetermined threshold, and classifying the pixel as a misregistered pixel IFF the image filter kernel is greater than the predetermined threshold

9. The method of claim 7 wherein said reducing includes reducing the chrominance component of the misregistered pixel to provide a corrected pixel with a fuzzy chrominance reduction function.

10. The method of claim 7 which further includes locating an edge pixel position and classifying the edge position pixel as a text region.

11. A method for correcting misregistration of scanned thin line character

components, comprising:

detecting a misregistered pixel, including identifying a pixel as being at an edge of
an image portion, wherein said identifying includes identifying a pixel as being at an edge of an
5 image portion using a gradient edge detector, including selecting an image kernel filter, having
integer values GTE -2 and LTE +2, including zero, setting a predetermined threshold, comparing
the image filter kernel to the predetermined threshold, and classifying the pixel as a misregistered
pixel IFF the image filter kernel is greater than the predetermined threshold;

determining whether the misregistered pixel is part of a character, including
10 checking the gradient and checking the luminance of a pixel;

applying a three-dimensional color vector determinant to the misregistered pixel;

and

reducing the chrominance component of the misregistered pixel to provide a
corrected pixel.

12. The method of claim 11 wherein said reducing includes reducing the chrominance
component of the misregistered pixel to provide a corrected pixel with a fuzzy chrominance
reduction function.

13. The method of claim 11 which further includes locating an edge pixel position
and classifying the edge position pixel as a text region